ABSTRACT

Methods of forming sintered valve metal are described. The methods involve sintering a valve metal such as tantalum or niobium in the presence of an iodine source. The method optionally includes deoxidizing the metal using the same equipment used in sintering and/or as a combined step. The sintered valve metal formed by the methods of the present invention preferably has relatively large pores and other properties desirable for making capacitors that have high capacitance and low leakage.